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how files;ds
File 350:Derwent WPIX 1963-2001/UD,UM &UP=200159
         (c) 2001 Derwent Info Ltd
File 344:CHINESE PATENTS ABS APR 1985-2001/Aug
         (c) 2001 EUROPEAN PATENT OFFICE
File 347:JAPIO OCT 1976-2001/JUN(UPDATED 011001)
         (c) 2001 JPO & JAPIO
File 371:French Patents 1961-2001/BOPI 200141
         (c) 2001 INPI.  All rts. reserv.

Set     Items   Description
S1     566677   CONTAMINAT? OR CORRUPT? OR IMPUR? OR POLLUT? OR INFECT? OR
              TAINT?
S2     393212   CROP? OR FRUIT? OR VEGETABL? OR WHEAT OR CORN OR PLANT? ?
S3       1277   GMO OR GENETIC?()MODIF?
S4       5790   GM
S5    2038515   SEPARAT? OR PROTECT? OR SEGREGAT? OR IDENTIF? OR SORT?
S6      18221   S5(3N)S2
S7          4   S6 AND S1 AND S3
S8          4   S7 NOT AD=>000817
S9       1978   ORGANIC?(3N)S2
S10    167442   PURE? OR NON()MODIF? OR REGULAR?
S11      1016   S10(3N)S2
S12         3   (S9 OR S11) AND (S3 OR S4)
S13         3   S12 NOT AD=000817
S14         3   S12 NOT AD>=000817
S15     25289   (S2 OR S3)(4N)S5(4N)S2
S16      3147   (S2 OR S3)(4N)S5(4N)CROP?
S17         1   (S3 OR S4)(4N)S5(4N)CROP?
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8/7/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013628091 **Image available**
WPI Acc No: 2001-112299/200112
New tetrazine derivatives useful as pesticides
Patent Assignee: NOVARTIS AG (NOVS); SYNGENTA PARTICIPATIONS AG (SYNG-N); NOVARTIS-ERFINDUNGEN VERW GES MBH (NOVS)
Inventor: EBERLE M; JEANGUENAT A; NAEF R; STEIGER A; TRAH S; ZAMBACH W
Number of Countries: 094 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200078739	A1	20001228	WO 2000EP5627	A	20000619	200112	B
AU 200054056	A	20010109	AU 200054056	A	20000619	200122	

Priority Applications (No Type Date): CH 991148 A 19990621
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200078739	A1	E	88	C07D-257/08	

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW

AU 200054056	A		C07D-257/08	Based on patent WO 200078739

Abstract (Basic): WO 200078739 A1

NOVELTY - Tetrazine derivatives (I) are new.

DETAILED DESCRIPTION - Tetrazine derivatives of formula (I) and their E/Z isomers and/or tautomers and salts are new.

T-V=NN or NHNH;

X1=a group R1;

X2=X3, H or R1;

R1=halo, CN, CN, NO2, 1-6C alkyl, 3-8C cycloalkyl, 1-6C haloalkyl, 3-8C halocycloalkyl, 1-6C alkoxy, 3-8C cycloalkoxy, 1-6C haloalkoxy, 3-8C halocycloalkoxy, 1-6C alkylthio, 3-8C cycloalkylthio, 1-6C haloalkylthio or 3-8C halocycloalkylthio;

Ar1=aryl or heteroaryl (both optionally substituted by 1-5 Q);

Q=OH, halo, CN, NO2, 1-6C alkyl, 3-8C cycloalkyl, 1-6C alkyl-3-8C cycloalkyl, 3-8C cycloalkoxy, 1-6C haloalkoxy, 3-8C halocycloalkoxy, 1-6C alkylthio, 3-8C cycloalkylthio, 1-6C haloalkylthio, 3-8C halocycloalkylthio, 1-6C alkylsulfonyl, 3-8C cycloalkylsulfinyl, 1-6C haloalkylsulfinyl, 3-8C halocycloalkylsulfinyl, 1-6C alkylsulfonyl, 3-8C cycloalkylsulfonyl, 1-6C haloalkylsulfonyl, 3-8C halocycloalkylsulfonyl, 2-8C alkenyl, 2-8C alkynyl, 2-7C alkylcarbonyl, (1-6C alkyl)C(=NOR-2) or R3;

Ar2=aryl or heteroaryl (both optionally substituted by 1-5 Q);

A=a bond, 1-12C alkylene, O, O-12C alkylene, S(O)n, S(O)n-1-12C alkylene, 2-8C alkenylene, 2-8C alkenylene, 2-8C alkynylene, NR6, NR61-12C alkylene or C(=Z);

Z=O, NR4, NNR4R5 or NOR4;

R2=H, 1-6C alkyl or 3-8C cycloalkyl;

R3=a group of formula (a);

R4, R5=H, 1-6C alkyl or 1-6C haloalkyl;

R6=H, 1-6C alkyl, 3-8C cycloalkyl, 1-6C haloalkyl, 2-8C alkenyl, 2-8C alkynyl, aryl-1-6C alkyl, (CH2)pC(O)R7 or 1-6C alkoxy-2-6C alkyl;

R7=H, 1-6C alkyl, 3-8C cycloalkyl, 1-6C haloalkyl, 1-6C alkoxy, N(R8)2 or 1-6C alkoxy-2-6C alkyl;

R8=H, 1-6C alkyl, 3-8C cycloalkyl, 1-6C haloalkyl or aryl-1-6C alkyl;

R9, R10=H or 1-6C alkyl;

m=1-4;
n=0-2;
p=0-6 and
Q=O or S,
provided that when T-V is NH-NH, then X1 is halo, X2 and X3 are H, Ar1 and Ar2 are optionally substituted phenyl, then A is not a bond.

ACTIVITY - Pesticidal; insecticidal; antiparasitic; acaricidal; antifungal.

MECHANISM OF ACTION - None given.

USE - Used for control of pests on domestic animals and productive livestock and in crops of useful plants. (I) Are active against all or individual development stages of normally sensitive animal pests, but also of resistant animal pests such as insects and acarina. (I) Are active against e.g. plant-destructive feeding insects such as Anthomonas grandis, Diabrotica balteata, Heliothis virescens larvae, Plutella xylostella and Spodoptera littoralis larvae and spider mites such as Tetranychus species in cotton, fruit, citrus, maize, soybean, rape and vegetable crops.

(I) Are also useful for **protecting** **plant** propagation material such as fruits, tubers or grains, or plant cuttings against fungal **infections** and animal pests. (I) Can be used in natural and **genetically** **modified** crops, especially cereals such as wheat, barley, rye, oats, rice, maize and sorghum, beet such as sugar and fodder beet, fruit, e.g. pomes, stone fruit and soft fruit such as apples, pears, plums, peaches, almonds, cherries and berries such as strawberries, raspberries and blackberries, legumes such as beans, lentils, peas and soybeans, oil plants such as rape, mustard, poppy, olives, sunflowers, coconut, castor oil, cocoa and groundnuts, cucurbitaceae such as marrows, cucumbers and melons, fiber plants such as cotton, flax, hemp and jute, citrus fruits such as oranges, lemons, grapefruit and mandarins, vegetables such as spinach, lettuce, asparagus, cabbage, carrots, onions, tomatoes, potatoes and paprika, lauraceae such as avocado, cinnamon and camphor and tobacco, nuts, coffee, aubergines, sugar cane, tea, pepper, vines, hops, bananas, natural rubber plants and ornamentals.

(I) Are also used to protect stored goods and storerooms and raw materials and in the hygiene sector, especially in the protection of warm blooded animals including farm animals such as cows, pigs, sheep and goats, poultry such as hens, turkeys and geese, animals bred for their fur such as mink, foxes, chinchillas and rabbits and domestic animals such as cats and dogs and humans against e.g. fleas.

(I: T-V=N=N; R1, X3=H; X1, X2=F; R2=-(3,5-C12-Ph) gives at least 80% reduction in pest populations of Diabrotica balteata, Heliothis virescens and Spodoptera littoralis at an application rate of 100 ppm.

ADVANTAGE - (I) Are well tolerated by warm-blooded animals, fish and plants. (I) Have an advantageous biocidal spectrum even at low concentrations.

pp; 88 DwgNo 0/0

Derwent Class: B02; B03; C02; D22; E13; F06
International Patent Class (Main): C07D-257/08
International Patent Class (Additional): A01N-043/713; C07D-401/04

8/7/2 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX

011916427
WPI Acc No: 1998-333337/199829
****Genetically** **modified** Pseudomonas strains - useful to **protect** **crop** **plants** by controlling or inhibiting plant pathogen growth, e.g. growth of Rhizoctonia species**
Patent Assignee: NOVARTIS AG (NOVS)

Inventor: GAFFNEY T D; HILL D S; LAM S T; LIGON J M; STAFFORD J M; TORKEWITZ N R
Number of Countries: 079 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9824919	A1	19980611	WO 97EP6815	A	19971205	199829	B
AU 9858544	A	19980629	AU 9858544	A	19971205	199845	
EP 941350	A1	19990915	EP 97954359	A	19971205	199942	
			WO 97EP6815	A	19971205		

Priority Applications (No Type Date): US 9758304 A 19970909; US 96761258 A 19961206
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9824919	A1	E	85	C12N-015/78	
AU 9858544	A			C12N-015/78	Based on patent WO 9824919
EP 941350	A1	E		C12N-015/78	Based on patent WO 9824919

Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW
Designated States (Regional): AT BE CH DE DK EA ES FI FR GB GH GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW
Designated States (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

Abstract (Basic): WO 9824919 A

A genetically engineered biocontrol strain of Pseudomonas that can control attacks on crop plants by pathogenic fungi, e.g. Rhizoctonia and Pythium and aggressively compete with indigenous bacteria and microflora in the plant rhizosphere, is new.

USE - The strains can be included with agronomically acceptable carriers or chemical fungicides (e.g. metalaxyl compounds) in biocontrol compositions (claimed). The strains or compositions can be applied to a **plant**/**plant** part to **protect** it from a **plant** pathogenic fungus, by controlling or inhibiting fungal growth (claimed). They can also be applied to the environment in which a plant pathogenic fungus will grow (e.g. soil) to similarly control or inhibit pathogen growth (claimed), or to seeds to **protect** **plants** developing from the seed from a plant pathogenic fungus (claimed). They are especially effective against Rhizoctonia and Pythium species which cause damping off in cotton. Rhizoctonia also **infects** many other crop species (e.g. beans and wheat), and no effective chemical fungicides are available.

Dwg.0/0

Derwent Class: C05; C06; D16
International Patent Class (Main): C12N-015/78
International Patent Class (Additional): A01N-063/00; C12N-001/20; C12N-015/52; C12N-015/78; C12R-001-39

8/7/3 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX

008504792
WPI Acc No: 1991-008876/199102
New stable asexually **genetically **modified** protoplast of genus Coffea - used to regenerate **plant** cell and seed **protected** against microbial and pest **infection****
Patent Assignee: ESCAGENETICS CORP (ESCA-N); ESKA GENETICS CORP (ESKA-N)
Inventor: ADAMS T L; ZAROWITZ M A
Number of Countries: 017 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 405505	A	19910102	EP 90112259	A	19900627	199102	B
AU 9057868	A	19910103				199108	
CA 2019882	A	19901227				199111	
JP 3172174	A	19910725	JP 90169697	A	19900627	199136	
US 5334529	A	19940802	US 89373021	A	19890627	199430	
			US 91726579	A	19910812		
			US 92988009	A	19921210		

Priority Applications (No Type Date): US 89373021 A 19890627; US 91726579 A 19910812; US 92988009 A 19921210
Cited Patents: NoCitns.
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 405505	A				
Designated States (Regional): AT BE CH DE ES FR GB GR IT LI LU NL SE					
US 5334529	A		8	C12N-005/14	Cont of application US 89373021
					Cont of application US 91726579

Abstract (Basic): EP 405505 A

A stable asexually **genetically** **modified** protoplast of the genus Coffea, which regenerates to a plant, is new.

Also claimed are: (1) a plant cell regenerated from the protoplast; (2) a plant and its constituent parts comprising the cell of (1); (3) a seed produced by the plant of (2); (4) a plant with the pheudypic characteristics of one arising from the seed of (3); (5) prodn. of the protoplast comprising: (a) culturing Coffea explant tissue to produce a callus; (b) isolating a cell suspension from the callus; (c) treating the cell suspension to obtain photoplasts; and (d) transforming the photoplasts.

USE/ADVANTAGE - The use of cell culture technology enables isolation, characterisation and development of **genetically** **modified** protoplast which transmit a **genetic** **modification** to their progeny, e.g. Kanamycin resistance. A wide variety of regulatory and structural genes may be introduced into the protoplast to become integrated into the genome so that e.g. plant growth can be inhibited or nutrient requirements (such as carbohydrate) modified. The plant can be adapted to survive in hostile environments, protected against microbial and pest **infection** and given resistance to herbicides.

Dwg.0/0

Abstract (Equivalent): US 5334529 A

Isolate cell is derived from a protoplast of species Coffea arabica which is derived from cell line C1-2. Cell line is genetically transformed by electroporation or protoplast fusion to form a stable trait.

Cell is transform with foreign DNA of a different species of Coffea arabica w.r.t. the cell. Transformation DNA includes marker gene.

USE - Cell obtd. is maintained in culture and regenerated to plantlet having the stable trait.

Dwg.0/0

Derwent Class: D16; P13
International Patent Class (Main): C12N-005/14
International Patent Class (Additional): A01H-001/06; A01H-004/00; A01H-005/00; C12N-015/05

8/7/4 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

004803903

WPI Acc No: 1986-307244/198647
****Genetically** **modifying** plants - by **infecting** with transfer microorganism contg. a replicon which contains viral DNA**
Patent Assignee: NOVARTIS AG (NOVS); CIBA GEIGY AG (CIBA); CIBA GEIGY CORP (CIBA); MYCOGEN PLANT SCI INC (MYCO)
Inventor: GRIMSLEY N H; HOHN B; HOHN T; BOULTON M I; DAVIES J W
Number of Countries: 020 Number of Patents: 015
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
GB 2174995	A	19861119	GB 8611356	A	19860509	198647	B
EP 201904	A	19861120	EP 86106440	A	19860512	198647	
JP 61260886	A	19861119	JP 86109363	A	19860513	198701	
AU 8657356	A	19861120				198702	
BR 8602126	A	19870113				198708	
ZA 8603485	A	19861112	ZA 86603485	A	19860512	198708	
HU 41939	T	19870629				198730	
GB 2174995	B	19890705				198927	
DD 279503	A	19900606				199045	
IL 78761	A	19910718				199136	
EP 201904	B1	19930421	EP 86106440	A	19860512	199316	
DE 3688301	G	19930527	DE 3688301	A	19860512	199322	
			EP 86106440	A	19860512		
US 5569597	A	19961029	US 86859682	A	19860505	199649	
			US 87118094	A	19871105		
			US 88211080	A	19880621		
			US 90497799	A	19900322		
			US 90526949	A	19900522		
			US 91798859	A	19911122		
			US 92966248	A	19921026		
			US 94272958	A	19940711		
JP 3057204	B2	20000626	JP 86109363	A	19860513	200035	
CA 1341290	C	20010911	CA 508796	A	19860509	200156	

Priority Applications (No Type Date): CH 852026 A 19850513; CH 864456 A 19861107; CH 872255 A 19870616
Cited Patents: 1.Jnl.Ref; EP 116718; EP 126546; WO 8402920
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
GB 2174995	A		7		
EP 201904	A	G			
Designated States (Regional): AT BE CH DE FR GB IT LI LU NL SE					
EP 201904	B1	G	22	C12N-015/82	
Designated States (Regional): AT BE CH DE FR IT LI LU NL SE					
DE 3688301	G			C12N-015/82	Based on patent EP 201904
US 5569597	A		27	C12N-015/00	Cont of application US 86859682 Cont of application US 87118094 Cont of application US 88211080 CIP of application US 90497799 Cont of application US 90526949 CIP of application US 91798859 Cont of application US 92966248
JP 3057204	B2		7	C12N-015/09	Previous Publ. patent JP 61260886
CA 1341290	C	E		C12N-015/83	

Abstract (Basic): GB 2174995 A

Method of inserting viral DNA into plant material comprises (a) inserting viral DNA which may contain cargo DNA into a T-replicon, in the vicinity of one or more T-DNA border sequences, the distance between the viral DNA and the T-DNA sequence or sequences being chosen such that viral DNA, including any cargo DNA present, is transferred to plant material, (b) introducing the replicon into a transfer microorganism and (c) **infecting** plant material with the transfer microorganism that has been modified in accordance with (b).

USE/ADVANTAGE - The superinfection of plants contg. parts of viral genomes integrated into the nuclear DNA permits the development of better viral vectors and contributes to a better understanding of host-parasite relationships and thus better **protection** of **plants**. The method can be used in **plant** **protection** to immunise **plants** agianst virus attack by transforming plants with a weakened non-pathogenic or only slightly pahtogenic virus. The method is partic. suitable for insulating selected genes into plants e.g. adult plants, in which they then proliferate.

Dwg.0/1

Abstract (Equivalent): EP 201904 B

A method of inserting plant-virus DNA into plant material, which comprises (a) inserting viral DNA which comprises more than one viral genome or parts thereof which are still capable of initiating a systemic **infection** in the host plant and which may contain cargo DNA into a T-replicon, in the vicinity of one or more T-DNA border sequences, the distance between said viral DNA and the T-DNA border sequence or sequences being chosen such that viral DNA, including any cargo DNA present, is transferred to plant material, (b) introducing the replicon into a transfer micro-organism, and (c) **infecting** plant material with the transfer micro-organism that has been modified in accordance with (b) and thus causing a systemic **infection** of the plants. (Dwg.0/1)

Abstract (Equivalent): GB 2174995 B

A method of inserting viral DNA into plant material, which comprises a) inserting viral DNA which may contain cargo DNA into a T-replicon, in the vicinity of one or more T-DNA border sequences, the distance between said viral DNA and the T-DNA sequence or sequences being chosen such that viral DNA, including any cargo DNA present, is transferred to plant material, b) introducing the replicon into a transfer micro-organism, and c) **infecting** plant material with the transfer micro-organism that has been modified in accordance with b).

Abstract (Equivalent): US 5569597 A

Transforming plants with cloned viral DNA, wherein the cloned viral DNA, normally not **infectious** upon mechanical inoculation, is amenable by this method for transformation by a transfer microorganism of the genus Agrobacterium, comprises (a) inserting cloned viral DNA capable of giving rise to a systemic **infection** and that may contain cargo DNA, into a T-replicon of an Agrobacterium, having one or more T-DNA border sequences, wherein the distance between the cloned viral DNA and the T-DNA border sequences is chosen such that cloned viral DNA, including any cargo DNA present, is genetically transferred to the plant material; (b) introducing the T-replicon into a transfer microorganism of the genus Agrobacterium, the replicon passing into the transfer microorganism; (c) preparing a microorganism-containing transforming suspension culture comprising the transfer microorganism obtained in step (b); and (d) **infecting** plant material with the transfer microorganism that has been modified in accordance with step (b).

(Dwg.0/1

Derwent Class: C03; D16; P13; P73

International Patent Class (Main): C12N-015/00; C12N-015/09; C12N-015/82; C12N-015/83

International Patent Class (Additional): A01H-001/00; A01H-005/00; A01N-063/00; C07G-017/00; C12N-001/20; C12N-001/21; C12N-005/00; C12N-005/04; C12N-005/14; C12N-015/05; C12N-015/29; C12R-001/19; C12R-001-01

?

14/7/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX

009473747
WPI Acc No: 1993-167288/199320
Extending shelf life of fruit or vegetables - by snap freezing at below freezing pt. for a time so short that the flesh does not freeze
Patent Assignee: MELDRUM C R (MELD-I)
Inventor: MELDRUM C R
Number of Countries: 038 Number of Patents: 008
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9308696	A1	19930513	WO 92US9305	A	19921030	199320	B
US 5229152	A	19930720	US 91786709	A	19911101	199330	
AU 9230571	A	19930607	AU 9230571	A	19921030	199338	
EP 614336	A1	19940914	EP 92924153	A	19921030	199435	
			WO 92US9305	A	19921030		
US 5364648	A	19941115	US 91786709	A	19911101	199445	
			US 9393527	A	19930719		
EP 614336	B1	19980812	EP 92924153	A	19921030	199836	
			WO 92US9305	A	19921030		
DE 69226648	E	19980917	DE 626648	A	19921030	199843	
			EP 92924153	A	19921030		
			WO 92US9305	A	19921030		
ES 2121871	T3	19981216	EP 92924153	A	19921030	199906	

Priority Applications (No Type Date): US 91786709 A 19911101; US 9393527 A 19930719
Cited Patents: 4.Jnl.Ref; BE 473363; EP 111590; JP 3087168; JP 55085350; JP 58224676; US 2385140; US 4940599
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9308696	A1	E	31	A23B-007/05	
Designated States (National): AU BB BG BR CA CS FI HU JP KP KR LK MG MN MW NO PL RO RU SD US					
Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL OA SE					
US 5229152	A		11	A23B-007/00	
AU 9230571	A			A23B-007/05	Based on patent WO 9308696
EP 614336	A1	E		A23B-007/05	Based on patent WO 9308696
Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL SE					
US 5364648	A		10	A23B-007/00	Div ex application US 91786709 Div ex patent US 5229152
EP 614336	B1	E		A23B-007/05	Based on patent WO 9308696
Designated States (Regional): DE ES FR GB IT					
DE 69226648	E			A23B-007/05	Based on patent EP 614336 Based on patent WO 9308696
ES 2121871	T3			A23B-007/05	Based on patent EP 614336

Abstract (Basic): WO 9308696 A

The shelf-life of produce is extended by (i) subjecting it to a snap freeze medium; (ii) keeping this medium at or below freezing point and (iii) removing the prod. from the medium. Snap-freezing comprises exposing to freezing temps. for a time insufficient to freeze the flesh of the prod.

The snap-freeze medium is a slurry of non-artificial byprods., esp. of the same or a similar species. The medium also contains sugars, fruit acids and/or acetic acid. Snap-freezing is at 27-32 deg for 10-30 secs. The prod. is esp. first washed in a preconditioning bath. This is esp. at elevated temp. with sub-to ultrasonic vibration, esp, for 5-30 secs. at 90 deg and 20-2000 KHz. The prod. was then dried to

crystallise a film of slurry on the outer surface of the produce. The drying is at a constant temp. of 60-70 deg.

USE/ADVANTAGE - Fruit and vegetables, esp. tomatoes, are better preserved than by refrigeration, waxing, ethylene treatment or *genetic* *modification*.

Dwg.0/1

Abstract (Equivalent): US 5364648 A

Shelf-life of produce is extended by (a) subjecting to a chilled medium to coat it with a layer without freezing. and (b) transferring prod. to a drying location to form nucleation crystals of medium whithin surface pores on the produce.

Chilling temp. is 27-32 deg.C for 10-30 sec. chilled medium comprises a slurry of non-artificial by-prods., including sugars, *organic* *fruit* acids and/or acetic acid.

ADVANTAGE - Nucleation crystals in the produce pores increase shelf-like and maintains its natural organoleptic properties.

Dwg.0/1

US 5229152 A

Extending the shelf life of produce comprises subjecting the produce to snap freeze medium for snap freezing the produce such that the produce is coated with a layer of the medium. The process includes maintaining the produce in the medium sufficiently to prevent the produce from freezing, maintaining the medium at a temp. below or substantially at the freezing point of water; and transferring the produce from the medium.

The medium comprises slurry of non-artificial by-prods. The produce is snap frozen at approx. 27-32 deg for 10-30 secs.

ADVANTAGE - The shelf life of the produce can be greatly extended and certain taste and quality values enhanced for many species of produce.

Dwg.0/1

Derwent Class: D13

International Patent Class (Main): A23B-007/00; A23B-007/05

International Patent Class (Additional): A23B-007/08; A23B-007/154; A23B-007/16

14/7/2 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX

008532443

WPI Acc No: 1991-036527/199105

Biological insect control agents - comprising nuclear polyhedrosis virus with inactivated EGT gene encoding ecdysteroid UDP-glucosyl transferase

Patent Assignee: UNIV GEORGIA RES FOUND INC (UYGE-N); UNIV GEORGIA (UYGE-N)

Inventor: MILLER L K; OREILLY D R; O'REILLY D R; OREILLY D; OREILLEY D R

Number of Countries: 032 Number of Patents: 028

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9100014	A	19910110				199105	B
PT 94557	A	19910208				199109	
AU 9059588	A	19910117				199117	
FI 9100968	A	19910227				199121	
EP 432256	A	19910619	EP 90911176	A	19900629	199125	
ZA 9005123	A	19910529	ZA 905123	A	19900629	199125	
NO 9100796	A	19910227				199126	
DK 9100351	A	19910228				199128	
BR 9006835	A	19910806				199136	
JP 4500611	W	19920206	JP 90510167	A	19900629	199212	
HU 58475	T	19920330				199217	
DD 296311	A	19911128				199218	
US 5180581	A	19930119	US 89373952	A	19890629	199306	

EP.432256	B1	19940406	EP 90911176	A	19900629	199414
			WO 90US3758	A	19900629	
DE 69007952	E	19940511	DE 607952	A	19900629	199420
			EP 90911176	A	19900629	
			WO 90US3758	A	19900629	
US 5352451	A	19941004	US 89373952	A	19890629	199439
			WO 90US3758	A	19900629	
			US 91656179	A	19910228	
ES 2063370	T3	19950101	EP 90911176	A	19900629	199508
IE 62564	B	19950208	IE 902391	A	19900629	199518
IL 94820	A	19970415	IL 94820	A	19900621	199726
PH 27658	A	19930923	PH 40740	A	19900627	199823
RU 2099420	C1	19971220	WO 90US3758	A	19900629	199832
			SU 4894798	A	19910128	
JP 2968997	B2	19991102	JP 90510167	A	19900629	199951
			WO 90US3758	A	19900629	
FI 104263	B1	19991215	WO 90US3758	A	19900629	200005
			FI 91968	A	19910227	
PH 29857	A	19960813	PH 40740	A	19900627	200007
			PH 45752	A	19930219	
CA 2033169	C	19991123	CA 2033169	A	19900629	200015
			WO 90US3758	A	19900629	
HU 217846	B	20000428	HU 905629	A	19900629	200030
			WO 90US3758	A	19900629	
KR 165121	B1	19990115	WO 90US3758	A	19900629	200038
			KR 91700241	A	19910228	
NO 308691	B1	20001016	WO 90US3758	A	19900629	200056
			NO 91796	A	19910227	

Priority Applications (No Type Date): US 89373952 A 19890629; ZA 905123 A 19900629; US 91656179 A 19910228
Cited Patents: 1.Jnl.Ref; EP 225777; EP 336341; GB 1441094
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9100014	A		64		
Designated States (National): AU BR CA DK FI HU JP KR NO SD SU US					
Designated States (Regional): AT BE CH DE DK ES FR GB GR IT LU NL					
EP 432256	A				
Designated States (Regional): AT BE CH DE ES FR GB IT LI LU NL SE					
JP 4500611	W		20		
US 5180581	A		22	A01N-063/00	
EP 432256	B1 E		34	A01N-063/00	Based on patent WO 9100014
Designated States (Regional): AT BE CH DE ES FR GB IT LI LU NL SE					
DE 69007952	E			A01N-063/00	Based on patent EP 432256
					Based on patent WO 9100014
US 5352451	A		24	A01N-063/00	CIP of application US 89373952
					CIP of patent US 5180581
ES 2063370	T3			A01N-063/00	Based on patent EP 432256
IE 62564	B			A01N-063/00	
IL 94820	A			C12N-015/01	
PH 27658	A			A01N-063/00	
RU 2099420	C1		23	C12N-007/01	
JP 2968997	B2		46	C12N-007/00	Previous Publ. patent JP 4500611
					Based on patent WO 9100014
FI 104263	B1			C12N-015/33	Previous Publ. patent FI 9100968
PH 29857	A			A01N-063/00	Div ex application PH 40740
CA 2033169	C E			C12N-015/54	Based on patent WO 9100014
HU 217846	B			A01N-063/00	Previous Publ. patent HU 58475
					Based on patent WO 9100014
KR 165121	B1			A01N-063/00	
NO 308691	B1			A01N-063/00	Previous Publ. patent NO 9100796

Abstract (Basic): WO 9100014 A

An insect control agent comprisesm an insect parasite in which a naturally occurring gene encoding an ecolysteroid-modified enzyme is inactivated.

Also claimed are: (1) an insecticidal compsn. comprising an insect control agent, *genetically* *modified* so as to inactivate a naturally occurring gene encoding ecolysteroid UDP-glucosyl transferase; (2) a recombinant DNA molecular comprising a nucleotide sequence of a gene encoding ecolysteroid UDP-glucosyl transferase; (3) a recombinant ecolysteroid UDP-glucosyl transferase comprising the amino acid sequence below or having not less than 20% homology with this sequence; (4) a pure ecolysteroid UDP-glucosyl transferase having the amino acid sequence below or not less than 70% homology with it; and (5) a monoclonal or polyclonal antibody specific for the protein of (4).

USE/ADVANTAGE - The genes encode proteins which affect the growth, development or behaviour of insects. The genes are either inactivated to prevent insect molting and pupation or is inactivated to reduce the feeding behaviour, inhibit growth and result in the earlier death of the insect host. (64pp Dwg.No.0/0

Abstract (Equivalent): EP 432256 B

An insect control agent comprising an insect parasite in which a naturally occurring gene encoding an ecdysteroid-modifying enzyme is inactivated.

Dwg.0/11

Abstract (Equivalent): US 5180581 A

Insect control agent is a nuclear polyhedrosis virus in which a naturally occurring gene encoding an ecdysteroid UDP-glucosyl transferase is inactivated. The virus is e.g., Autographa californica or Orgyia pseudotsugate.

Also claimed is a method for producing the agent.

USE/ADVANTAGE - Prevents insect molting and pupation or reduces their feeding behaviour, inhibit growth and result in the earlier death of the insect host.

Dwg.0/15

US 5352451 A

Biological insect control agent comprises a *genetically* *modified* baculovirus in which a naturally-occurring gene that encodes prodn. of ecdysteroid UDP-glucosyl transferase has been inactivated.

Pref. baculovirus is a nuclear polyhedrosis virus, e.g. Autographa californica or Orgyia pseudotsugata.

USE/ADVANTAGE - *Genetically* *modified* baculovirus is dispersed with carriers and opt. additives and applied to insect habitats. Process is efficient in insect control, and avoids use of toxic *organic* chemicals with food *crops*.

Dwg.0/11

Derwent Class: C03; D16

International Patent Class (Main): A01N-063/00; C12N-007/00; C12N-007/01; C12N-015/01; C12N-015/33; C12N-015/54

International Patent Class (Additional): A01N-063/02; C07K-014/435; C07K-015/04; C12N-009/10; C12N-009/12; C12N-015/00; C12N-015/09; C12N-015/29; C12N-015/34; C12N-015/86; C12N-015/866; C12P-019/34; C12P-021/02; C12R-001-91

14/7/3 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

001200511

WPI Acc No: 1974-74400V/197443

Bread production avoiding fermentation phase - by addition of *wheat* gluten hydrolysate and *organic* acids

Patent Assignee: KANSAS STATE UNIV RES (UNIY); KANSAS UNIV RES FOU (UNIV)

Number of Countries: 008 Number of Patents: 008
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
BE 816048	A	19740930				197443	B
DE 2427619	A	19750213				197508	
FR 2239204	A	19750404				197520	
JP 50036659	A	19750405				197522	
ZA 7402162	A	19750227				197522	
US 3897568	A	19750729				197532	
GB 1468925	A	19770330				197713	
CA 1021192	A	19771122				197749	

Priority Applications (No Type Date): US 73385167 A 19730802

Abstract (Basic): BE 816048 A
Yeast contg. prods. are prepd. by making a dough of flour yeast, and a wheat gluten protein hydrolysate consisting mainly of the individual amino acids of the gluten protein) and a mixt. of org. acids, consisting mainly of acetic acid, lactic acid or their mixts. as the free acid or NA, K or Ca salt. The amts. being 0.02-0.20 wt.% min acids (w.r.t. wt. of flour and 1-10 x 10-4 moles of acid per 700 *gm* of flour used. This is then shaped and baked without a long fermentation stage to produce a bread with improved or equal props. as the bread produced in the normal way.
Derwent Class: D11
International Patent Class (Additional): A21D-002/26; A21D-008/00; C12C-000/00
?

17/7/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013733695
WPI Acc No: 2001-217925/200122
Novel Escherichia coli genomic segment, useful for detecting bacterial regulatory elements responsive to variety of cellular stresses, consists of sulfometuron methyl-responsive regulatory region
Patent Assignee: DU PONT DE NEMOURS & CO E I (DUPO)
Inventor: LAROSSA R A; VAN DYK T K
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6194159	B1	20010227	US 96735545	A	19961023	200122	B
			US 99449083	A	19991124		

Priority Applications (No Type Date): US 96735545 A 19961023; US 99449083 A 19991124
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6194159	B1		35	C12Q-001/68	Div ex application US 96735545 Div ex patent US 6025131

Abstract (Basic): US 6194159 B1

NOVELTY - An Escherichia coli 1.9 kbase genomic segment (GS) bounded by 150 and 95 base pair sequences, a 1.4 kbase GS bounded by 428 and 554 basepair sequences, a 1.8 kbase GS bounded by 229 and 205 base pair sequences, or a 1.6 kbase GS bounded by 203 and 410 base pair sequences, all fully defined in the specification, is new. GS consists of sulfometuron methyl (SM)-responsive regulatory region.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a gene fusion (I) comprising a SM-responsive regulatory region consisting of the E. coli GS, the SM-responsive regulatory region operably linked to a luminescent reporter gene complex;

(2) a plasmid (II) comprising the E. coli GS operably linked to a thermostable luxCDABE gene complex, and a transcription terminator region upstream of the promoter;

(3) a transformant (III) comprising a suitable host cell and (II), where (III) is sensitive to SM; and

(4) detecting (M) a crop protection chemical, comprising:

(a) contacting a chemical compound with a detector organism containing GS comprising a responsive regulatory region operably linked to a luminescent reporter gene complex, GS selected from an E. coli 1.9 kbase genomic segment bounded by 150 and 95, 185 and 479, or 164 and 285 base pair sequences, an E. coli 1.4 kbase genomic segment bounded by 414 and 283, or 428 and 554 base pair sequences, an E. coli 1.3 kbase genomic segment bounded by 533 and 183, or 87 and 134 base pair sequences, an E. coli 2.5 kbase genomic segment bounded by 174 and 219 base pair sequences, an E. coli 1.8 kbase genomic segment bounded by 229 and 205 base pair sequences, an E. coli 1.2 kbase genomic segment bounded by 186 and 507 base pair sequences, an E. coli 1.6 kbase genomic segment bounded by 203 and 410 base pair sequences, an E. coli 1.0 kbase genomic segment bounded by 223 and 260 base pair sequences, and an E. coli 2.0 kbase genomic segment bounded by 172 and 527 base pair sequences, all fully defined in the specification), and

(b) measuring an increase in bioluminescence in the detector organism, indicating that the chemical compound activates the responsive regulatory region and is a crop protection chemical.

USE - (*GM*) is useful for detecting *crop* *protection* chemicals (claimed) and for detecting bacterial regulatory elements responsive to a variety of cellular stresses (produced by cellular insults) such as

herbicides, environmental pollutants, heavy metals, changes in temperature, changes in pH, agents producing oxidative damage, insults causing DNA damage, insults causing anaerobiosis, and biological insults such as the pathogenic life forms.

ADVANTAGE - Promoters and stress responsive regulatory regions undetectable by conventional methods are identified using (M). Promoters encompassing more than 1000-fold range of activity were readily found by (M), which is far greater than the range of promoter activity found by conventional methods, and to identify promoters undetectable by standard methods.

pp; 35 DwgNo 0/6

Derwent Class: B04; C06; D16

International Patent Class (Main): C12Q-001/68

International Patent Class (Additional): C07H-021/04; C12N-001/21; C12N-015/63

?

13/3,K/1 (Item 1 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)

07531850 Supplier Number: 63128763 (USE FORMAT 7 FOR FULLTEXT)
EU farm ministers tackle GM rape crops.(Brief Article)
Agra Europe, pEP/1
June 2, 2000
Language: English Record Type: Fulltext
Article Type: Brief Article
Document Type: Magazine/Journal; Trade
Word Count: 617

... an ad hoc Committee meeting in June.
Seed purity issue
"It's a question of **seed** purity," summarised UK minister Nick Brown, rejecting claims that the recent **GM** **contamination** cases posed a threat to the environment or health; it was a **purely** trade and market issue, he said. "We need to look into how we can protect...

13/3,K/2 (Item 1 from file: 20)
DIALOG(R)File 20:World Reporter

13946501 (USE FORMAT 7 OR 9 FOR FULLTEXT)
Wisconsin Scientist Discovers Technology to Lock Foreign Genes Out of Corn
Terry Devitt
KRTBN KNIGHT-RIDDER TRIBUNE BUSINESS NEWS (ENVIRONMENTAL NEWS NETWORK)
November 26, 2000
JOURNAL CODE: KENN LANGUAGE: English RECORD TYPE: FULLTEXT
WORD COUNT: 827

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... the Wisconsin Alumni Research Foundation, would have instant appeal to organic farmers and farmers whose **corn** or **corn** products might be marketed to countries that now bar imports of **genetically** **modified** grain.
"This technology can potentially solve the problem of **contamination** of **regular** hybrid **corn** and organic hybrid **corn** by any **genetically** **modified** organism during the growing season," says Gerrish. "This technology could also allow a farmer to...

13/3,K/3 (Item 2 from file: 20)
DIALOG(R)File 20:World Reporter

12464195 (USE FORMAT 7 OR 9 FOR FULLTEXT)
Demand for crop trials ban after GM pollen triggers food chain fears
GRAEME SMITH
HERALD (UNITED KINGDOM), p12
May 17, 2000
JOURNAL CODE: FGH LANGUAGE: English RECORD TYPE: FULLTEXT
WORD COUNT: 332

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... and beekeepers about the trials.'
FoE director Kevin Dunion said: 'We now have evidence that **GM** **crops** can **contaminate** honey. Honey is seen as a **pure** and natural product. The public have already made it clear they do not want

GM food - they won't be happy if the Government allows GMOs to threaten their honey...

13/3,K/4 (Item 3 from file: 20)
DIALOG(R)File 20:World Reporter

11472753 (USE FORMAT 7 OR 9 FOR FULLTEXT)
GM seeds scatter wrath on legal wind
Stanley Oziewicz in Toronto
SOUTH CHINA MORNING POST, p14
June 13, 2000
JOURNAL CODE: FSCP LANGUAGE: English RECORD TYPE: FULLTEXT
WORD COUNT: 317

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... to "letting the genie out of the bottle". Unleashed and uncontrollable, the lawyer said, the **seeds** will **contaminate** **non** -**modified** **crops**.
GM foods result from gene-splicing technology that inserts part of the gene strand of one...

13/3,K/5 (Item 4 from file: 20)
DIALOG(R)File 20:World Reporter

11436695
EU to pay for 'GM accident'
INDEPENDENT
June 10, 2000
JOURNAL CODE: FIND LANGUAGE: English RECORD TYPE: FULLTEXT
WORD COUNT: 45

... it will reimburse farmers who had to destroy rape seed crops contaminated by genetically modified **seed** . Hundreds of hectares in Britain, France, Belgium, Sweden and Finland were **contaminated** after **GM** **seeds** had been accidentally mixed with **regular** colza **seeds**.
Foreign News 16

13/3,K/6 (Item 5 from file: 20)
DIALOG(R)File 20:World Reporter

11240360
GM SEED FEARS GROW
ONASA NEWS AGENCY
May 28, 2000
JOURNAL CODE: WONA LANGUAGE: English RECORD TYPE: FULLTEXT
WORD COUNT: 178

... was made on Wednesday by the environmental group, Greenpeace. The spokesman, Simlon Preece, said the **GM** material could have crossed into supposedly **pure** supplies via wind pollination or **contamination** from **seed**-crushing machines, which process both types of seed. The admission comes just days after a...

13/3,K/7 (Item 6 from file: 20)

DIALOG(R)File 20:World Reporter

04405466 (USE FORMAT 7 OR 9 FOR FULLTEXT)
GM Foods: Revealed: the secret report
SECTION TITLE: Features
INDEPENDENT ON SUNDAY
February 21, 1999
JOURNAL CODE: FINS LANGUAGE: English RECORD TYPE: FULLTEXT
WORD COUNT: 709

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... inter-breeding of GM oilseed was carried out on oilseed rape populations by the Scottish **Crops** Institute between 1992 and 1997.

The report says that the evidence "indicates the inevitable **contamination** under current agricultural practice of **non**-**modified** oilseed rape fields by pollen imported from **GM** fields of the **crop**. This has important implications for growers."

A spokeswoman for the National Farmers' Union said it...

13/3,K/8 (Item 1 from file: 129)
DIALOG(R)File 129:PHIND(Archival)

00668634
EU wants GM (genetically modified) seed contamination threshold
Agrow 354 p8, June 16, 2000 (20000616)
STORY TYPE: F WORD COUNT: 834

...Meanwhile, member states continue to take action to tighten rules on GM **seed**. In France, a government bill requiring the monitoring of **seed** imports to detect potential **contamination** with **GM** material
is being examined. The proposal, which aims to establish **regular** checks on imported **seed**, irrespective of labelling, has gone through Parliament and is now being debated by the Senate...

13/3,K/9 (Item 2 from file: 129)
DIALOG(R)File 129:PHIND(Archival)

00617158
GM (genetically modified) crop crisis in Europe
Agrow 320 Review-Issue 1998 p5, January 15, 1999 (19990115)
STORY TYPE: F WORD COUNT: 1914

...already turned into an emotional issue.
Environmentalist groups opposed to "Frankenstein foods" and the "genetic **pollution**" from **GM** **crops** issued **regular** updates on the
locations and progress of **GM** **crop** trials, amounting to a European-wide policing of the companies' activities.
Concern about the environmental...
?

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show files;ds
File   9:Business & Industry(R) Jul/1994-2001/Oct 15
         (c) 2001 Resp. DB Svcs.
File  16:Gale Group PROMT(R) 1990-2001/Oct 15
         (c) 2001 The Gale Group
File  18:Gale Group F&S Index(R) 1988-2001/Oct 15
         (c) 2001 The Gale Group
File  19:Chem.Industry Notes 1974-2001/ISS 200142
         (c) 2001 Amer.Chem.Soc.
File  20:World Reporter 1997-2001/Oct 16
         (c) 2001 The Dialog Corporation
File  50:CAB Abstracts 1972-2001/Sep
         (c) 2001 CAB International
File  54:FOODLINE(R): Market Data 1979-2001/Oct 15
         (c) 2001 LFRA
File  79:Foods Adlibra(TM) 1974-2001/Oct
         (c) 2001 General Mills
File 129:PHIND(Archival) 1980-2001/Oct W1
         (c) 2001 PJB Publications, Ltd.
File 130:PHIND(Daily & Current) 2001/Oct 16
         (c) 2001 PJB Publications,Ltd.
File 148:Gale Group Trade & Industry DB 1976-2001/Oct 15
         (c)2001 The Gale Group
File 160:Gale Group PROMT(R) 1972-1989
         (c) 1999 The Gale Group
File 248:PIRA 1975-2001Oct W4
         (c) 2001 Pira International
File 252:Packaging Sci&Tech 1982-1997/Oct
         (c) 1997 by Fraunhofer-ILV, Germany
File 285:BioBusiness(R) 1985-1998/Aug W1
         (c) 1998 BIOSIS
File 481:DELPHES Eur Bus 95-2001/Oct W1
         (c) 2001 ACFCI & Chambre CommInd Paris
File 583:Gale Group Globalbase(TM) 1986-2001/Oct 16
         (c) 2001 The Gale Group
File 621:Gale Group New Prod.Annou.(R) 1985-2001/Oct 15
         (c) 2001 The Gale Group
File 635:Business Dateline(R) 1985-2001/Oct 16
         (c) 2001 ProQuest Info&Learning
File 636:Gale Group Newsletter DB(TM) 1987-2001/Oct 15
         (c) 2001 The Gale Group

Set     Items   Description
S1    2023235   CONTAMINAT? OR CORRUPT? OR IMPUR? OR POLLUT? OR INFECT? OR
             TAINT?
S2    6862438   CROP? OR FRUIT? OR VEGETABL? OR WHEAT OR CORN OR PLANT? ?
S3     323407   GMO OR GM OR GENETIC?()MODIF?
S4    7352203   SEPARAT? OR PROTECT? OR SEGREGAT? OR IDENTIF? OR SORT?
S5    1662724   PURE? OR NON()MODIF? OR REGULAR?
S6       4751   S1 AND S2 AND S3 AND S4
S7      53119   (TRANSGENIC? OR S3)(3N)(S2 OR SEED?)
S8       6167   S7 AND S1
S9       2994   S8 AND S4
S10       843   S9 AND (DETECT? OR SENS?)
S11        11   (S3 OR TRANSGENIC?)(4N)S1(4N)S5(4N)(S2 OR SEED?)
S12        22   S4(3N)(S3 OR TRANSGENIC?)(4N)S5(4N)(S2 OR SEED?)
S13         9   RD S11 (unique items)
?
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MAIL-IT REQUESTED: OCTOBER 16, 2001 100J1V

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YOUR SEARCH REQUEST AT THE TIME THIS MAIL-IT WAS REQUESTED:
(GMO OR GM OR TRANSGENIC!) W/10 (CONTAMINAT! OR INFECT! OR CORRUPT! OR TAINT!) W/10 (CROP OR SEED) W/10 (REGULAR OR NON-GMO OR ORDINARY) W/10 (CROP OR SEED)

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LEVEL 1... 15

LEVEL 1 PRINTED

DISPLAY FORMAT: FULL

The Independent (London)

June 10, 2000, Saturday

SECTION: FOREIGN NEWS; Pg. 16

LENGTH: 46 words

HEADLINE: EU TO PAY FOR 'GM ACCIDENT'

BODY:

THE EU says it will reimburse farmers who had to destroy rape **seed crops** contaminated by genetically modified **seed.** Hundreds of hectares in Britain, France, Belgium, Sweden and Finland were **contaminated** after **GM seeds** had been accidentally mixed with **regular** colza **seeds.**

LOAD-DATE: June 12, 2000

Financial Times (London)

May 18, 2000, Thursday London Edition 2

SECTION: NATIONAL NEWS;

Pg. 3

LENGTH: 398 words

HEADLINE: NATIONAL NEWS: GM seed mix-up contaminated crops AGRICULTURE ENVIRONMENTAL GROUPS URGE GOVERNMENT TO DESTROY FIELDS OF OILSEED RAPE:

BYLINE: By CATHY NEWMAN

BODY:

The government is being urged to tear up thousands of acres of oilseed rape after it was forced to admit the **crops** had been accidentally **contaminated** by genetically modified **seed.**

The herbicide-resistant **GM** rapeseed found its way into **ordinary seed,** distributed to up to 600 farms and sown across more than 30,000 acres.

The majority of the crops have been harvested, and some GM seed will have found its way into animal feed. The remaining 10,000 acres are still growing, leading to fears that surrounding plants could be contaminated. Farms growing oilseed rape could become renewed targets for environmental activists.

Environmental groups reacted with dismay to the mix-up. They demanded that the government uproot the crops without delay to prevent the emergence of herbicide-resistant weeds.

However, the Ministry of Agriculture, Fisheries and Food maintained there was no need to do so because its independent advisers had said there was no risk of cross-pollination as the GM seeds were male and sterile.

Adrian Bebb, food campaigner for Friends of the Earth, said: "Yet again the government has been shown to be complacent and secretive about GM crops. It has covered up this fiasco and played down its importance, protecting the interests of the GM industry rather than the safety and security of the public."

The ministry was told a month ago that Advanta Seeds UK had distributed rapeseed contaminated with 1 per cent of GM seed to between 500 and 600 farmers. More than 20,000 acres of the seed - used in animal feed - was planted last year, with the remainder being sown this spring. John Prescott, the deputy prime minister, would decide whether the later crop should be destroyed.

The government said that the affected areas represented less than 3 per cent of oilseed rape grown in the UK. But Friends of the Earth said that the number of acres contaminated dwarfed the 1,500 acres set aside for government trials of GM crops. The experiments aim to assess the environmental impact of the technology.

Baroness Hayman, an agriculture minister, announced yesterday that the government would press for new legal standards for seed purity. "We have consulted both the advisory committee on releases to the environment and the Food Standards Agency, who have confirmed the view that there is no risk to public health or the environment," she said.

LOAD-DATE: May 17, 2000

Journal of Commerce

May 3, 2000, Wednesday

SECTION: GLOBAL COMMERCE; Pg. 9

LENGTH: 927 words

HEADLINE: Value-added crops keep farmers in the field, despite protests abroad

BYLINE: BY GENE LINN

BODY:

The current furor over genetically modified crops obscures the long- term importance of adding value to grain and soybean exports, agricultural experts said.

Biotechnology and breeding will increasingly add traits to crops to meet market requirements, they said. And farmers and grain middlemen will guarantee that specific traits reach end-users through a process called identity preservation.

Growing demand to create value will replace some of the traditional reliance on commodity sales of different varieties blended to meet average standards for protein and other qualities, according to industry participants.

""In the long term, we're looking at a new business relationship," said Bob Neal, specialty grains manager at Cargill Inc., Minnetonka, Minn.

For now, news reports focus on resistance to genetically modified (GMO) crops exported by the United States to Europe and Japan. Consumer groups in those countries warn that modifying the genetics of food is a potentially dangerous step into unknown territory. They say that eating food that has been genetically changed might lead to health problems, and they insist on receiving non-GMO products.

Actual demand for non-GMO foods, however, is still relatively small, industry experts said.

""It appears some niche markets are opening up," said an analyst at the Foreign Agricultural Service of the U.S. Department of Agriculture, who declined to be identified.

Archer Daniels Midland Co., Decatur, Ill., supplies non-GMO corn to Japan's Kirin Brewery and edible soy protein to processors for some big supermarket chains in Europe, said Larry Cunningham, ADM senior vice president for corporate affairs.

Using the identity preservation process, farmers start with seeds guaranteed to have the desired trait, but which are not genetically modified. Farmers clean planting and harvesting equipment to make sure the **crops** are not **contaminated** by **GMO** plants. They have to use separate fields for **non-GMO** products and ensure that the **crops** are not contaminated by cross pollination from nearby fields.

Farmers and ADM also clean storage facilities and trucks and other means of transportation. Each step is documented so the end-user can be sure of the traits in a specific crop. In the end, ADM tests the crops to make sure they are not genetically modified.

Cargill gives farmers manuals and videos to teach identity preservation techniques. The company also recently sent five farmers to Japan to learn about market demands there. It is expected to become more common for farmers to produce for a specific end-user.

Cargill's acquisition of Continental Grain Co.'s Commodity Marketing Group last year provides assets such as grain elevators that will make it easier to implement identity preservation, Neal said.

Cunningham said the demand for non-GMO crops probably will last a few more years and then subside. ""Scientific evidence is there is no (health) difference in GMO crops," he said.

Cargill's Neal asserted that in the future the GMO issue ""will look like a speed bump."

One reason the issue is important now is that the first genetic modifications have benefited farmers by making the crops easier to grow, he said. Consumers see no direct benefits and focus on potential harmful effects. That will change, Neal said.

""We'll start getting into output traits (for processors and end-users) that are exciting," he said.

The GMO controversy is a ""short-term transition" to more-widespread use of value-added crops and identity preservation, he said.

Among the output traits predicted by industry experts are soybeans with more vitamin E and more-nutritious rice that will help feed poor people in Asia and Africa. Crops may be produced without trans-fatty acids harmful to health.

Some corn varieties may be genetically engineered with an amino acid profile suited especially for chickens, while another will be designed for hogs.

Cargill is in almost daily contact with customers to find out what specific needs they have, Neal said. Part of the new business relationship will be determining these traits. The cost of the higher-value product will be agreed on based partly on the degree of purity required. Japan now requires a non- GMO purity level of 95 percent, Neal said.

He and other industry experts said that although biotechnology will put the sizzle in value-added crops, traditional breeding techniques and identity preservation already have added value to some varieties and will continue to do so.

Cargill, for example, recently negotiated with two farmer cooperatives in Kansas for separating and preserving the identity of hard white winter wheat required by some end-users.

Mike Boland, agricultural economist at Kansas State University, said the United States lags behind export competitor Australia in breeding useful traits and getting them to consumers through identity preservation.

""Our competitors are able to differentiate themselves from us," he said.

For example, he said, Australia has a centralized wheat-breeding program that has eliminated an enzyme that turns noodles black. The new product is popular in Asia.

Commodity crops will continue to be important, experts said. But even if the GMO controversy subsides, value-added crops and identity preservation will become increasingly important.

Jerry Barr, chief economist at the National Council of Farmers Cooperatives in Washington, D.C., said, ""If crops are co-mingled, it will reduce their value or eliminate some potential markets."

GRAPHIC: Photo - A farmer south of Clinton, Iowa, guides his John Deere combine through rows of soybean while harvesting.;

LOAD-DATE: May 3, 2000

9/7/1 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

12103404 BIOSIS NO.: 199900398253
Effects of Chlorella vulgaris on bone marrow progenitor cells of mice infected with Listeria monocytogenes.
AUTHOR: Dantas Denise CM; Queiroz Mary LS(a)
AUTHOR ADDRESS: (a)Department of Pharmacology and Hemocentre, Faculty of Medical Sciences, State University of Camp**Brazil
JOURNAL: International Journal of Immunopharmacology 21 (8):p499-508 Aug., 1999
ISSN: 0192-0561
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English

ABSTRACT: In this study we investigated the effects of the treatment with Chlorella vulgaris extract (CVE) on the hematopoietic response of granulocyte-macrophage colony-forming unit (CFU-GM) of mice infected with a sublethal dose of Listeria monocytogenes (1 X 104 organisms/animal). CVE was given orally as 50 mg/kg/day for 5 days. In the CVE treated/infected groups L. monocytogenes was administered at the end of CVE treatment. The colony stimulating activity of the serum (CSA) was also studied in all groups. Although no effects on CFU-GM, as compared to controls, were observed in the groups receiving CVE alone, the extract produced an increase in CSA levels as compared to controls. On the other hand, the presence of the infection led to a significant reduction in the numbers of CFU-GM as observed at 48 and 72 h after the infection, in spite of the significant increase in serum CSA activity. CVE treatment of infected animals restored the numbers of CFU-GM to control levels. In thetreated/infected group the increased serum CSA was significantly higher than that observed in the only infected group. The CVE treatment (50 and 500 mg/kg) of mice infected with a dose of 3 X 105 bacteria/animal, which was lethal for all the non-treated controls, produced a dose-response protection which led to a 20 and 52% survival, respectively. These results demonstrated that CVE produces a significant increase in the resistance of the animals **infected** with L. monocytogenes, and that this **protection** is due, at least in part, to increased CFU-**GM** in the bone marrow of **infected** animals.

9/7/2 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

10975422 BIOSIS NO.: 199799596567
Yeast infection in prawns (Macrobrachium rosenbergii de Mann) in Taiwan.
AUTHOR: Lu Chow-Chin(a); Tang Feng-Jyu; Yoichiro Ueno; Kou Guang-Hsiung; Chen Shiu-Nan
AUTHOR ADDRESS: (a)Dep. Zool., Natl. Taiwan Univ., Taipei**Taiwan
JOURNAL: Acta Zoologica Taiwanica 8 (1):p33-45 1997
ISSN: 1019-5858
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English; Chinese

ABSTRACT: During 1994 we investigated the prevalence of yeast infection in freshwater prawns (Macrobrachium rosenbergii de Mann) cultured in southern Taiwan. Most (30%) infections occurred during the winter (Dec.-Feb.), and none were found during the summer. The prevalences were highest in adults (73%) followed by juveniles (25%), and postlarvae (2%).

No yeast infections were found in the larvae. The gross clinical signs of infection included: yellow-brown body coloration, swelling of the hepatopancreas, and a white cloudiness of muscle tissue and hemolymph. Histopathological examinations of affected tissues revealed extensive necrosis associated with large numbers of membrane-bound yeast aggregates. In addition, there were many vacuolized cells in the epithelium of the hepatopancreas. Budding yeast cells were abundant in the hemolymph. We isolated the yeast from various tissues, and numbers of yeast cells were: 9.26 times 10-10 CFU (gm-1) in the hepatopancreas, 2.91 times 10-10 CFU (gm-1) in muscle, 3.49 times 10-8 CFU (gm-1) in the gills, and 1.79 times 10-11 CFU (**gm**-1) in hemolymph. Two yeast species were **identified** as Candida sake and Candida famata. Experimental **infection** with the isolated yeast (Candida sake) produced a mortality rate of 100% when the culture temperature was 20 degree C. Histopathological results in experimentally infected, moribund prawns were essentially the same as those found in naturally infected prawns collected from ponds.

9/7/3 (Item 3 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

08402926 BIOSIS NO.: 000094120580
CYTOKINE-INDUCED RESISTANCE TO MICROBIAL INFECTIONS IN NORMAL IMMUNOSUPPRESSED AND BONE MARROW TRANSPLANTED MICE
AUTHOR: LESHEM B; DEKEL R; BERCOVIER H; TCHAKIROV R; POLACHECK I; ZAKAY-RONES Z; SCHLESINGER M; KEDAR E
AUTHOR ADDRESS: LAUTENBERG CENTER GENERAL TUMOR IMMUNOLOGY, HEBREW UNIVERSITY-HADASSAH MEDICAL SCH., JERUSALEM 91010, ISRAEL.
JOURNAL: BONE MARROW TRANSPLANT 9 (6). 1992. 471-477. 1992
FULL JOURNAL NAME: Bone Marrow Transplantation
CODEN: BMTRE
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

ABSTRACT: We studied the efficacy of in vivo and in vitro treatments with IL-1, IL-2, IL-3, and GM-CSF in the protection against bacterial (Salmonella typhimurium), fungal (Candida albicans) and viral (influenza virus A/PR8) infections, of normal, sublethally irradiated and lethally irradiated, bone marrow (BM) reconstituted mice. In parallel, the cytokines were tested for their ability to potentiate hematopoietic activity in vitro and in vivo. We demonstrate that, under the experimental conditions employed, IL-1 had the best protective activity against the three micro-organisms in both normal and immunocompromised mice when administered in vivo. Administration of IL-2 led to increased resistance in normal but not in immunodeficient mice, whereas GM-CSF had no beneficial effects. In contrast, preincubation of BM cells in these cytokines, singly or combined, prior to transplantation to lethally irradiated mice, did not confer **protection** against subsequent **infection**, although it increased the number of BM derived CFU-**GM** in culture (except in the case of IL-2). Administration of IL-1 or GM-CSF to BM transplanted mice facilitated WBC recovery, whereas IL-2 delayed it. Collectively, the data suggest that IL-1, alone or combined with other cytokines, may be beneficial in the prevention or treatment of microbial infections in imunocompromised and BM transplanted patients. It can also be concluded that enhanced hematopoietic recovery may not always coincide with the development of resistant to micro-organisms.

9/7/4 (Item 1 from file: 98)
DIALOG(R)File 98:General Sci Abs/Full-Text

04020885 H.W. WILSON RECORD NUMBER: BGSI99020885
Getting to the root of protein production.
AUGMENTED TITLE: new protein production technique
Travis, John
Science News (Sci News) v. 155 no18 (May 1 1999) p. 279
LANGUAGE: English
COUNTRY OF PUBLICATION: United States

ABSTRACT: In the May Nature Biotechnology, Ilya Raskin of Rutgers University in New Brunswick, New Jersey, and colleagues describe a new protein production technique that involves collecting secretions from **tomato** **plants**. **Tomato** **plants** naturally secrete a variety of proteins from their roots largely to **protect** themselves against bacteria and other **infections**. The researchers exploited this secretion pathway by **genetically** **modifying** three genes and inducing the **tomato** **plants** to secrete significant quantities of each gene's protein. Subsequent collection of the proteins were simplified by growing the **plants** hydroponically, in a nutrient-containing solution rather than in soil. Although none of the proteins produced were of commercial interest, test revealed that the process did not destroy their activity.

9/7/5 (Item 1 from file: 203)
DIALOG(R)File 203:AGRIS

02237435 AGRIS No: 1998-048374
Expression of recombinant antibody fragments in **plants**
Owen, M.R.L.; Cockburn, W.; Whitelam, G.C. (Department of Botany, University of Leicester, University Road, Leicester LE1 7RH (United Kingdom))
Transgenic **plants: a production system for industrial and pharmaceutical proteins**
Owen, M.R.L.; Pen, J. (eds.)
Publisher: John Wiley and Sons Ltd , Chichester (United Kingdom), 1996, p. 245-260
ISBN: 0-471-96444-1
Notes: 48 ref.
Language: English
Place of Publication: United Kingdom
Document Type: Analytic, Monograph,
Journal Announcement: 2406 Record input by United Kingdom

9/7/6 (Item 2 from file: 203)
DIALOG(R)File 203:AGRIS

02167269 AGRIS No: 97-126790
Multiple land and product use (Review) (Viceucelove vyuziti pudy a produktu)
Mikula, P. (Ustav Zemedelskych a Potravinarskych Informaci, Prague (Czech Republic))
Publisher: Ustav Zemedelskych a Potravinarskych Informaci , Prague (Czech Republic), 1996, 62 p.
Series title: Studijni Informace - Rostlinna Vyroba (Czech Republic), no. 6
Notes: 5 tables; 102 ref.
ISSN: 0862-3562
Language: Czech Summary Language: Czech, English
Place of Publication: Czech Republic
Document Type: Monograph, Summary, Review Article

Journal Announcement: 2310 Record input by Czech Republic
Abstract in English
Trends and possibilities of land use, especially of land use for non-food purposes are summarized in this publication. For food purposes, several prospective **crops** and some newer applications of well-known **crops** are mentioned. The review also pays attention to technical **crops** , renewable resources and miltiple use of agricultural products and wastes and their recycling with current technology. An important part is represented by agrotourism which can be a suitable financial complement to farmers' income, especially in marginal and less-favoured areas.

9/7/7 (Item 1 from file: 266)
DIALOG(R)File 266:FEDRIP

00274677
IDENTIFYING NO.: 0185156 AGENCY CODE: AGRIC
MARKETING AND DELIVERY OF QUALITY CEREALS AND OILSEEDSSDTDFYPXBTATDT
moisture content
ASSOCIATE INVESTIGATORS: Yang, W. W.; Siebenmorgen, T. J.
PERFORMING ORG.: UNIVERSITY OF ARKANSAS, FOOD SCIENCE, FAYETTEVILLE, ARKANSAS 72703
TYPE OF AWARD: HATCH |c H
SUMMARY: B. Assess the effects of postharvest microbial growth, insect infestation, chemical usage, drying and handling on quality of cereals and oilseeds during storage and transport. C. Quantify and define quality of cereals and oilseeds for various end-use markets. Several cultivars of rice will be obtained from two experiment station locations over a range of harvest moisture contents. The rice will be dried in a dryer (e.g., a thin-layer dryer, a cross-flow dryer) and samples will be taken at various drying durations. Fissure counting and head rice yield measurement will be taken for the samples taken at various drying durations. Moisture and temperature distribution inside
a single rice kernel will be determined using finite element modeling. The model predictions will be compared with the experimental results to infer the effect of drying procedures on rice quality. An emphasis will be laid on optimizing rice quality by incorporating glass transition temperature into drying and tempering. Modern instruments such as DSC, TMA, DMA, TGA, SEM, etc. will be used to study rice fissure formation and mechanism. **Corn** samples will be obtained from a **seed** supplier. Drying and web milling methods will be employed to develop a method for rapid removal of pericarp and for non-lethally chipping embryo to facilitate genetic tests for **seed** screening process or for
identification of **GMO**-**contaminated** **seeds** .PR element model has been developed to simulate the drying and tempering process of a single rice kernel. The intra-kernel moisture content gradient (MCG) between the outer bran surface at the short axis and the kernel center during the drying and tempering process was modeled and analyzed. The relationship between the time when the maximum MCG (MMCG) occurred during drying and the head rice yield trend was discussed. MMCG appeared in the direction of the short axis of a rough rice kernel. The kernel temperature approached very rapidly the drying air temperature in about 2.5 min. The maximum temperature gradient inside the kernel appeared in the
direction of long axis after around 20s drying at 60 deg. C, 17%RH. The intra-kernel MCG decreased very rapidly during the first 20min of tempering, after which it decreased slowly. During the tempering process, the moisture content at the kernel surface would increase and that at the kernel center would decrease to finally reach a uniform moisture content at all parts of the kernel when sufficient tempering time was given. However, it was found that the moisture at kernel surface had a much faster and greater change than that at kernel center. A tempering time of 42 min was sufficient to eliminate 90% of MCG when rice was dried at 60 deg. C and 17%

RH and then tempered at 60
deg. C. 2. Study of MCG, glass transition temperature and head rice yield trend of rice.A single kernel approach was taken to investigate the effect of MCG and glass transition temperature of rice on its head rice yield using a model cross-flow dryer. Statistical distribution of individual kernel moisture content and its standard deviation after various drying durations and at different locations across the drying column were measured using a single kernel moisture meter. Drying behavior of rice kernels was depicted on a glass transition state diagram for rice and related to milling quality of rice exemplified by head rice yield. It was found that at different locations in a dryer,
rice drying took place in different regions of a glass transition state diagram. The effect of drying was explained using the concepts of MMCG obtained by finite element simulation and the glass transition temperature of rice kernels.PB 2000. A glass transition hypothesis for explaining fissure occurrence during the rice drying process. Drying Technology (In press).PB reduction of long- and medium-grain rice varieties in relation to various harvest and drying conditions. Trans. of the ASAE. 43(6): In press.PB Incorporating the glass transition temper
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